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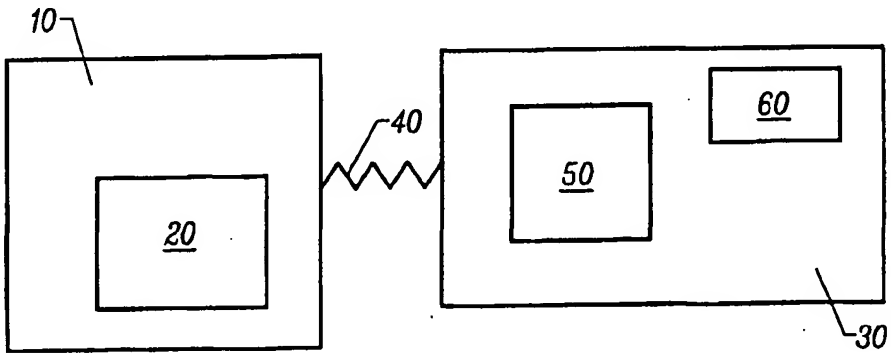

(57) Abstract

An on–line editor operates as though embedded in a Java–enabled Web browser which enables a user to edit information in a word processor environment. The editor supports most of the HTML formats, including support for graphics. Because the editor in the preferred embodiment is written in the Java programming language, it is cross–platform compatible with most Web browsers. A user is thus required to have a Java–enabled Web browser to access and interactively edit content while on–line to the site. The information generated by the user with the Java editor is stored automatically on the site server when the user clicks on the save button. Thus, there is no need for a site administrator or for any extensive HTML language knowledge, knowledge of Internet protocols, or extensive computer knowledge.

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Java Editor

BACKGROUND OF THE INVENTION

TECHNICAL FIELD

The present invention relates to editing systems. More particularly, the present invention relates to a Java editor operating as though embedded in a World Wide Web (Web) browser to provide a word processor environment to a user.

DESCRIPTION OF THE PRIOR ART

An intranet is like a mini Internet used in various industries. An Internet browser, or herein also referred to as the World Wide Web (Web) browser, is used to display and navigate the information of the intranet on Web pages. But unlike the Internet, only individuals who have been granted access to the intranet will see the information.

Presently, a Web page is created on a client's machine manually and off-line. It is then uploaded onto a desired site server. The process is lengthy and requires somewhat extensive knowledge of the HTML language, Internet protocols, and computers generally. In addition, HTML editing software is required to be previously loaded onto the client's machine.

A. A. Faustini, *System, Method and Article of Manufacture for Providing Dynamic User Editing of Object Oriented Components Used in an Object Oriented Applet or Application*, U.S. Patent No. 5,842,020 (Nov. 24, 1998) discloses a method, system and article of manufacture for dynamic editing of

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object oriented components used in an object oriented applet or application. An editor window is defined in predetermined class templates as a method corresponding to the editor. Then, when a component is instantiated from one of the predetermined classes, the editor is automatically opened to permit the user to make changes in the component's properties. When editing is completed, the editor window is closed, the changes are accepted and then displayed for the edited component. Components are thereafter monitored for a user re-editing request which, when detected, causes the editing cycle to be initiated.

The Faustini teachings are specific to software development, particularly application programming object oriented components, by software developers. To wit (col. 4, lines 57-67 and col. 5, lines 1-6):

> This is true in the development of general OOP based applications and also in development environments for creating Applets in a JAVA system. As the Java system and applet creation becomes more widely used, the need to simplify the development of these applications becomes desirable. In addition, while the developer in these prior art visual programming environments is given a Wizard that writes the underlying code to make an event involving one or more of the selected elements occur, the ability to simultaneously view and experience that interrelationship is not provided.
>
> It would be desirable to have the applets designed with such a tool, or the tool's objects, components or assemblies of objects and components or portions thereof, so that when a component is initially instantiated, a customization/editwindow would dynamically appear to allow a user to tailor the particular component.

It would be desirable to provide an interactive, on-line editor for a typical user on the World Wide Web (Web), wherein the user does not have to have any extensive HTML language knowledge, knowledge of Internet protocols, or

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extensive computer knowledge, and thereby greatly expand opportunities to contribute information to an intranet to possibly 98% of the intranet users.

It would advantageous to provide an interactive, on-line editor for a typical user on the World Wide Web (Web) wherein the editor operates as though embedded in a Web browser, and thereby ensuring HTML editing software is not required to be previously installed on the user's machine.

It would be advantageous to provide simpler navigation, or placement of pages, to a typical user, wherein the user does not have to hassle with uploading HTML files to a server and directory in order to add a new Web page.

SUMMARY OF THE INVENTION

An on-line editor operates as though embedded in a Web browser which enables a user to edit information in a word processor environment. The editor supports most of the HTML formats, including support for graphics. Because the editor in the preferred embodiment is written in the Java programming language, it is cross-platform compatible with most Web browsers. A user is thus required to have a Java-enabled Web browser to access and interactively edit content while on-line to the site. The information generated by the user with the Java editor is stored automatically on the site server when the user clicks on the save button. Thus, there is no need for a site administrator or for any extensive HTML language knowledge, knowledge of Internet protocols, or extensive computer knowledge.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a block diagram of main components of an alternate preferred embodiment according to the invention;

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Fig. 2 is a block diagram of main components of an alternate preferred embodiment according to the invention; and

Fig. 3 is a block diagram showing the loading of the editor onto a client machine from a server according to the invention.

DETAILED DESCRIPTION OF THE INVENTION

An on-line editor, loaded onto a client machine from a server, operates as though embedded in a Web browser, enabling a user to edit information in a word processor environment. The editor supports most of the HTML formats, including support for graphics. Because the editor in the preferred embodiment is written in the Java programming language, it is cross-platform compatible with most Web browsers. A user is thus required in the preferred embodiment to have a Java-enabled Web browser to access and interactively edit content while on-line to the site. The information generated by the user with the Java editor is stored automatically on the site server when the user clicks the save button. Thus, there is no need for a site administrator or for a user to have extensive HTML language knowledge, knowledge of Internet protocols, or extensive computer knowledge. The Java editor is simple to use and behaves similarly to most typical word-processing applications.

It is noted the document editor, being Java-based, runs on the client side even though it is not installed on it. It is run through the Web browser supporting it.

An intranet is like a mini Internet used in various industries. An Internet browser, or herein also interchangeable with the World Wide Web (Web) browser, is used to display and navigate the information of the intranet on Web pages. But unlike the Internet, only individuals who have been granted access to the intranet will see the information.

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A preferred embodiment of the invention is provided within an intranet environment that allows a common end-user to share information easily and to create and publish documents on a company intranet in real-time. The claimed invention is not limited to an intranet environment and can easily be provided, for example, for the Internet or extranet environments.

It is noted that in the preferred embodiment, anyone in a company is empowered to share information on the company's intranet, provided a user is granted permission to post documents. In contrast, currently a system administrator or someone with extensive computer knowledge controls information that is posted onto the intranet. The claimed invention is so simple that any user with only basic computer knowledge can contribute information to the company's site. The only computer knowledge required from such user is knowing how to use a Web browser.

By using the preferred embodiment of the invention, 98% of users are empowered to post information onto the intranet. Presently, it is estimated that 5 million people are empowered to post information onto the Web. The claimed invention greatly increases the number from 5 million to 150 million.

The preferred embodiment of the invention also provides simpler navigation or placement of pages to a typical user. For example, the user is able to add Web pages to an existing document as simply as inserting pages in a book. In the preferred embodiment, the user points to an edit button, clicks the mouse, and then modifies or adds a page to an existing document. While on-line, the user modifies the existing page or creates a page on the fly.

In the preferred embodiment the complexities and hassle of adding a page to a document at the correct juncture according to prior art is eliminated. The hassles of uploading HTML files to a server and directory on the server are eliminated. The present prior art solution consists in creating a Web page manually while off-line and uploading the same to the site server. The prior

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art process is lengthy and requires somewhat extensive knowledge of HTML language, Internet protocols, and computers generally.

Using the preferred embodiment of the invention, a company can find it easy to publish documents because a technical staff dedicated to the task of maintaining its intranet is not needed. Instead, the people who determine the intranet's content can actually be the ones to publish it on an ongoing basis. There's no need to learn HTML or any special commands. An application using the claimed invention walks a user through the process of publishing or removing documents easily and intuitively. Any authorized user can access and contribute information to the intranet. The preferred embodiment of the invention currently provides, but is not limited to titles of departments, their subcategories, page titles, and links to which a user can add, change, move or delete information.

If a user is a Marketing Communications manager, for example, and wants to announce to the company that a new ad campaign is about to break, the user can publish an announcement on the intranet home page or a marketing page. Members of the company are thereby allowed to read about the new ad strategy and even view the ads, which may be posted as gif or jpg files, for example.

In one embodiment and on each page throughout the intranet, an author's name appears at the top, as a byline. This way, if a user has questions about the content on a page, those inquiries may be directed to the author via email.

In the preferred embodiment each user is able to send a message to other users and to check new personal messages, wherein the messages are edited and posted in the same Java based editor used to edit group documents.

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In the preferred embodiment, the editor is created in Java and implements any of, but is not limited to the following:

- a WYSIWYG environment;
- simple HTML tag functions such as bold, italics, underline;
- providing a choice of several colors and sizes for the text;
- inserting links to other objects, such as, for example, documents, files, and intranet documents using a document browser;
- uploading and verifying images related to a user's text;
- usual formatting capabilities such as copy, cut, paste, and select all;
- usual formatting capabilities such as left, center or right justification;
- clearing content from a document;
- restoring a document;
- automatically saving a document onto a server; and
- editor help.

Fig. 1 is a block diagram of main components of an alternate preferred embodiment according to the invention. A Web browser 10 is loaded with a Java editor program 20 by a server 30. The Web browser is connected to the server 30 by a network connection 40. Associated with the server 30 and with the Java editor program 20 is a back engine 50 for controlling the editing functions and a storage 60 for saving new documents and modifications to existing documents.

Fig. 2 is a block diagram of main components of an alternate preferred embodiment according to the invention. A plurality of Web browsers 10 is connected to the server 30 by a plurality of network connections 40. Loaded by the server 30 onto each Web browser 10 is a copy of the Java editor 20. Associated with the server 30 and with the Java editor program 20 is the back engine 50 for controlling the editing functions and the storage 60 for saving new documents and modifications to existing documents.

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It is noted that another embodiment comprises a plurality of servers, wherein each server has associated server software.

Fig. 3 is a block diagram showing the loading of the editor onto a client machine from a server according to the invention. A Web browser 10 is previously embedded with a Java interpreter 70. When an end-user makes a particular request on the intranet, the server 30 loads 80 the Java editor program 20 onto the end-user's Web browser 70, which gets interpreted by the Java interpreter 70.

Accordingly, although the invention has been described in detail with reference to particular preferred embodiments, persons possessing ordinary skill in the art to which this invention pertains will appreciate that various modifications and enhancements may be made without departing from the spirit and scope of the claims that follow.

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CLAIMS

1. An editing system for an end-user to edit a Web document on-line comprising:

a Java-enabled Web browser;

a Web-enabled editor loadable onto said Web browser from a server;

a network connection between said Web browser and said server;

a back engine associated with said server for controlling some features of said Web-enabled editor, and

a storage associated with said server for storing some results from said Web-enabled editor.

2. The system of Claim 1, wherein the HTML language is supported.

3. The system of Claim 1, wherein said Web-enabled editor is created using the Java programming language.

4. The system of Claim 1, further providing cross-platform compatibility.

5. The system of Claim 1, wherein simplified navigation is provided.

6. The system of Claim 1, wherein said controlling some features of said Web-enabled editor and said storing some results from said Web-enabled editor is performed automatically.

7. The system of Claim 6, wherein said some features of said Web-enabled editor comprise, but is not limited to any of:

WYSIWYG functionality;

means for working with text, comprising any of, but not limited to:

bold;

italics;

underline;

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choice of colors for text;

choice of sizes for text;

left, center, or right justification;

copy, cut, paste, and select all; and

search for and replace said text;

means for inserting links to any of, but not limited to documents and files using a document browser;

means for uploading onto and verifying an image file in said document;

means for clearing content from said document;

means for restoring said document;

means for saving said document onto said server and for removing said document from said server; and

accessing editor help.

8. The system of Claim 7, wherein said image file is either of, but not limited to a .GIF and a .JPG file.

9. The system of Claim 1, further comprising:

a plurality of Web browsers;

a plurality of network connections; and

a plurality of servers, each of said plurality of servers having associated server software;

wherein each of said plurality of Web browsers is associated with at least one of a plurality of end-users and is connected to an associated server of said plurality of servers by an associated network connection of said plurality of network connections.

10. The system of Claim 1, wherein said end-user only with permission is allowed to edit said Web document.

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11. The system of Claim 1, wherein said loadable Web-enabled editor is automatically loaded by said server after said end-user making an associated initiating request from said Web-browser.

12. The system of Claim 9, wherein said end-user edits and posts an electronic message to any of said plurality of end-users.

13. The system of Claim 1, wherein said end-user's name appears on each page of said document.

14. A Java editor for a common end-user for creating on-line a new HTML document or modifying on-line an existing HTML document, said editor comprising any of:

means for initiation;

means for creating said new HTML document;

means for opening said existing HTML document;

means for editing text of said new or existing document;

means for manipulating images associated with said new or existing HTML documents;

means for inserting links from said new or existing documents to other Web documents; and

means for saving said new or existing documents.

15. The editor of Claim 14, wherein said other Web documents comprise intranet documents.

16. The editor of Claim 14, wherein said end-user only with permission can create said new HTML document or modify said existing HTML document.

17. The editor of Claim 14, wherein means for manipulating images comprises loading images.

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18. A process for a common end-user to use an on-line Java editor to create a new HTML document on-line or to modify an existing HTML document on-line, comprising the steps of:

providing means for initiating said Java editor;

providing means for creating said new HTML document or opening said existing HTML document;

providing means for editing text of said new or said existing HTML document;

providing means for manipulating images associated with said new or existing HTML documents;

providing means for inserting links from said new or existing documents to other Web documents; and

providing means for saving said new or existing documents.

19. The process of Claim 18, wherein said other Web documents comprise intranet documents.

20. The process of Claim 18, wherein said end-user only with permission can create said new HTML document or modify said existing HTML document.

21. The process of Claim 18, wherein means for manipulating images comprises loading images.

22. An editing system for a common end-user to edit a document on-line without having previously installed associated editor software, comprising:

a browser;

an editor loadable onto said browser by a server;

a network connection between said browser and said server;

a back engine associated with said server for controlling some features of said editor, and

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a storage associated with said server for storing some results from said editor.

23. The system of Claim 22, wherein on-line comprises, but is not limited to internet, intranet, and extranet technologies.

24. The system of Claim 22, wherein said system is cross-platform compatible.

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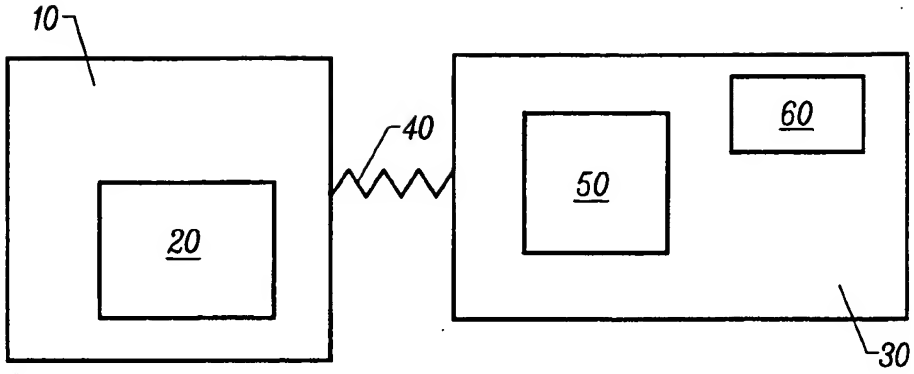

FIG. 1

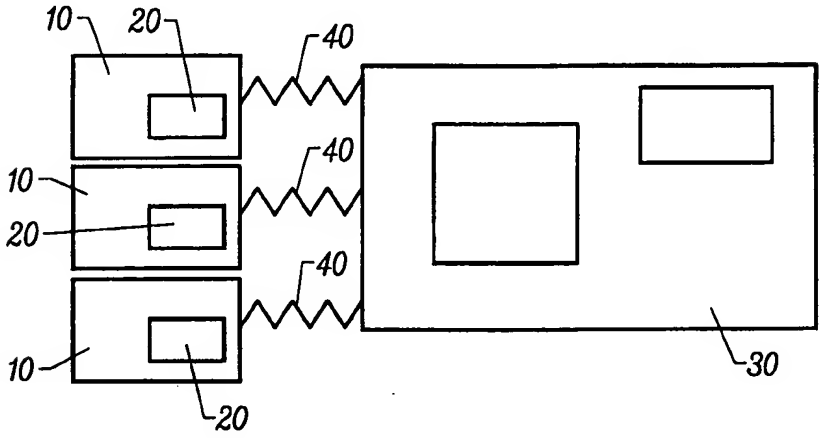

FIG. 2

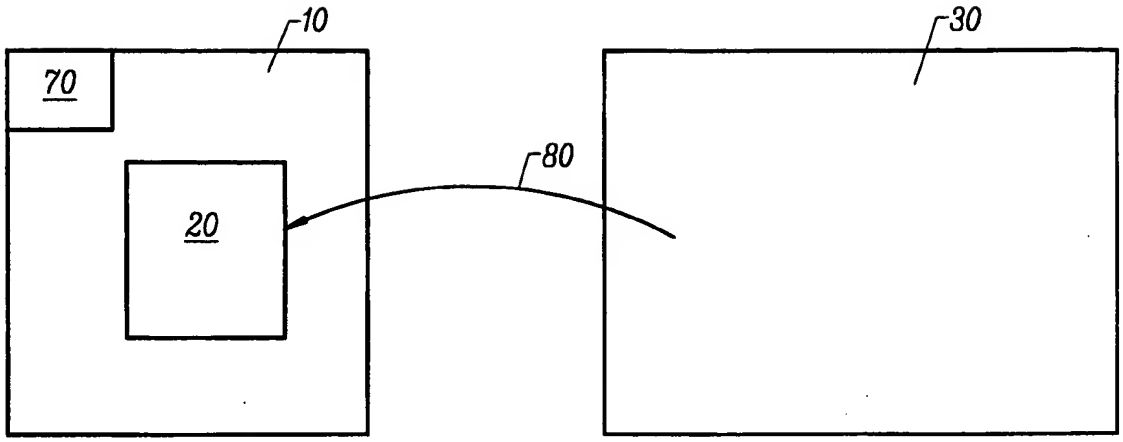

FIG. 3